

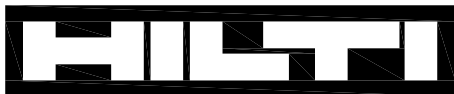
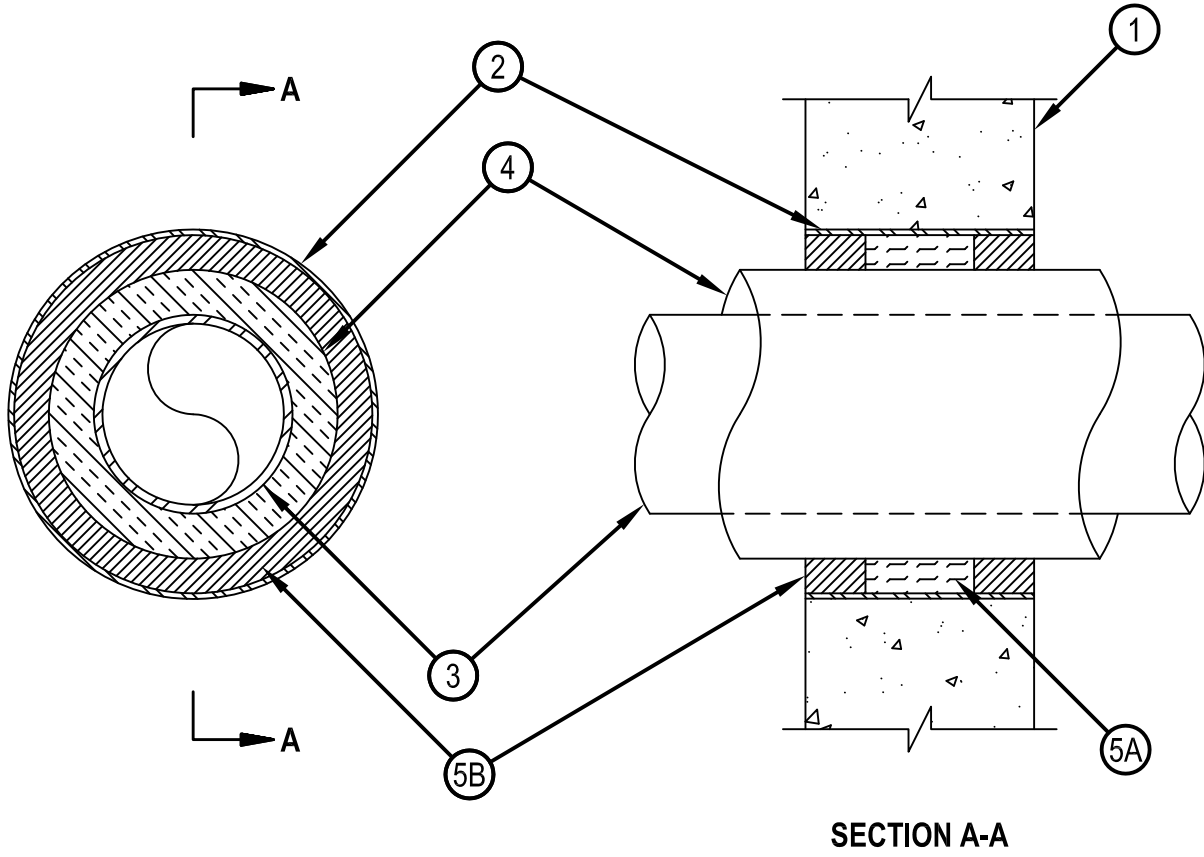


Classified by  
Underwriters Laboratories, Inc.  
to UL 1479 and CAN/ULC-S115

# System No. W-J-5028

ANSI/UL1479 (ASTM E814)	CAN/ULC S115
F Rating — 4 Hr	F Rating — 4 Hr
T Rating — 1-1/2 Hr	FT Rating — 1-1/2 Hr
	FH Rating — 4 Hr
	FTH Rating — 1-1/2 Hr

WJ 5028



**Hilti Firestop Systems**

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January 21, 2015

## System No. W-J-5028

WJ 5028

1. Wall Assembly — Min 7-5/8 in. (194 mm) thick wall assembly constructed of any UL Classified Concrete Blocks\*. Min 4 hr fire rated wall. Max diam of opening is 18-1/2 in. (470 mm).

See Concrete Blocks (CAZT) category in the Fire Resistance Directory for names of manufacturers.

2. Steel Sleeve — Cylindrical sleeve fabricated from min 0.035 in. (0.9 mm) thick (No. 20 gauge) galv steel sheet steel and having a min 2 in. (51 mm) lap along the longitudinal seam. Length of sleeve to be equal to thickness of wall. Sleeve to be installed by coiling the sheet metal to a diam smaller than the through opening, inserting the coil through the openings and releasing the coil to let it uncoil against the circular cutouts in the concrete blocks.

3. Through Penetrants — One metallic pipe or tubing to be installed concentrically within the firestop system. Pipe or tubing to be rigidly supported on both sides of the wall assembly. The following types and sizes of metallic pipes or tubing may be used:

A. Steel Pipe — Nom 12 in. (305 mm) diam (or smaller) Schedule 10 (or heavier) steel pipe.

B. Copper Tubing — Nom 6 in. (152 mm) diam (or smaller) Type L (or heavier) copper tubing.

C. Copper Pipe — Nom 6 in. (152 mm) diam (or smaller) Regular (or heavier) copper pipe.

4. Pipe Covering\* — Nom 1-1/2 in. (38 mm) thick hollow cylindrical heavy density (3.5 pcf or 56 kg/m<sup>3</sup>) glass fiber units jacketed of the outside with an all service jacket. Longitudinal joints sealed with metal fasteners or factory-applied self-sealing lap tape. Transverse joints secured with metal fasteners or with butt tape supplied with the product. The annular space between the insulated pipe and the steel sleeve shall be min 1-1/4 in. (32 mm) to max 1-1/2 in. (38 mm).

See Pipe Equipment Covering — Materials — (BRGU) category in the Building Materials Directory for names of manufacturers. Any pipe covering material meeting the above specifications and bearing the UL Classification Marking with a Flame Spread Index of 25 or less and a Smoke Developed Index of 50 or less may be used.

5. Firestop System — The fire stop system shall consist of the following:

A. Packing Material — Min 3-5/8 in. (92 mm) thickness of min 4 pcf (64 kg/m<sup>3</sup>) mineral wool batt insulation firmly packed into the opening as a permanent form. Packing material to be recessed from both surfaces of wall to accommodate the required thickness of fill material.

B. Fill, Void or Cavity Material\* — Sealant — Min 2 in. (51 mm) thickness applied within the steel sleeve, flush with both surface of wall.

HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — FS-ONE Sealant or FW-ONE MAX Intumescent Sealant

\* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.



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